



FEMA

Mill Creek Improved Stream-Bank Stabilization

Westmoreland County, PA - One of Westmoreland County's natural treasures, Mill Creek, recently got even better after some much-needed improvements that stabilized its stream-bank and slowed the amount of sediment entering this exceptional waterway.

Last fall, it was identified by the Westmoreland County Commissioners as one of 21 separate conservation projects to be funded under the state's Growing Greener II County Environmental Initiative.

Mill Creek is one of the last remaining high-quality recreational resources in the Ligonier Valley, according to an extensive report prepared in 2004 by the Forbes Trail Chapter of Trout Unlimited.

The group's 2004 conservation plan for the watershed identified the creek's outstanding qualities: its pristine beginnings in Laurel Mountain and the fact that it is a viable fishery for nearly its entire length.

Trout Unlimited also noted Mill Creek's few but significant trouble spots, including the site where Hannas Run enters the stream just below the community of Oak Grove. Here, the report said, bank erosion is perhaps "the most severe of any area in the entire watershed," and deemed this site the "number one priority" for remediation.

When the flow of Hannas Run struck the eastern side of Mill Creek, there wasn't much to stop it. The lack of streamside trees and vegetation, along with Mill Creek's six-foot-high, almost-vertical banks of soft, loamy soil, meant this site was extremely vulnerable to erosion.

The loose soil polluted the stream and degraded water quality from this point on. The severe erosion from this site was carried downstream and was a major contributor to the high volume of sediment that regularly builds up where Mill Creek crosses Route 30 just west of Ligonier. To solve the problem a number of groups and the local landowners joined forces and took a cue from nature.

"A large log had fallen into the stream against the east bank of Mill Creek and was helping to deflect the force of Hannas Run. So we added eight more like it – configuring these nine logs in groups of three and anchoring them at an angle that would deflect the flow of the water from Hannas Run," explained Rob Cronauer, watershed specialist for the Westmoreland Conservation District. This is one of the first times this "log deflector" approach has been used to improve a stream in Westmoreland County.

The remediation team also added a large mass of tree roots and 100 tons of stone to take the force of the water flowing in from Hannas Run and planted 100 live willow branch cuttings to help stabilize the vulnerable, 200-foot section of Mill Creek's stream-bank, which they also re-graded to reduce the severity of its slope.

The Westmoreland County Board of Commissioners, working with the Westmoreland Conservation District last fall, identified five other water-quality projects to be done for streams in the county located in Allegheny Township, New Kensington, Mount Pleasant Township, Derry Township, and Donegal Township.



Westmoreland County,
Pennsylvania



Quick Facts

Sector:

Public/Private Partnership

Cost:

\$10,000.00 (Estimated)

Primary Activity/Project:

Floodplain Management

Primary Funding:

State sources